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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, TAN D

ART UNIT	PAPER NUMBER
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3689

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 09/577,225	Applicant(s) LEWIS, LUNDY	
	Examiner Tan Dean D. Nguyen	Art Unit 3689	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,11,12,30,34-41,43 and 46-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,11,12,30,34-41,43 and 46-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/13/2010 has been entered.

1) Claims pending: 1, 3, 5, 10-12, 30-31, 34-39, 40-54, 57-58, and 61-64.

2) Claims new: 61-64

3) Claims cancelled: 2, 4, 6-10, 13-29, 42, 44-45.

They comprise of 2 groups:

1) method: 1, 3, 5, 11-12, 30, 34-39, 55-56, 59-61, and

2) system: 40-41, 43, 46-54, 57-58, and 62-64.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 9/13/2010 was filed after the mailing date of the application on May 23, 2000. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Terminal Disclaimer

3. The terminal disclaimer filed on 9/13/2010 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US

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patent 7,600,007 and 7,725,571 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. **Claims 1, 3, 5, 11-12, 30-31, 34-39, 55-56 (method), 40, 41, 43, 46-54 and 57-58 (system) and are rejected under 35 U.S.C. 103(a) as obvious over (1) BALL et al (US 6,446,200) in view of (2) Article Data Mining (1997) and (3) ADRIAANS et al.**

As for independent claims 1 and 40, BALL et al fairly teaches a method and system for providing service level management of a networking service provided to a business entity by identifying service parameters, determining the value of the service parameters, monitoring the service parameters, and taking action to change the parameters to restore the service to acceptable level as defined in a service level

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agreement (SLA), BALL et al discloses a similar method for providing service level management for a business process of an entity associated with a network comprising the steps of:

providing a service over the network, having a plurality of network components that support the service, wherein performance of the service depends upon performance of the network components that support the service, and a service parameter that represents the performance of the service;

{see Figs. 1 “monitoring a TCP/IP Network”, 3, 4, 5, 30, col. 2, lines 1-10 “*new level of service-services ...*”, col. 31 “service quality”},

monitoring, on a computer device, a plurality of component parameters for the plurality of network components that support the service, wherein the plurality of component parameters measure the performances of the plurality of network components that support the service;

{see Figs. 1 “monitoring a TCP/IP Network”, i.e. “transmission of data, or flow aggregation and distribution process”, “service quality packet loss”, see cols. 3-4, Figs. 29A, 29B, col. 31, lines 12-67, “service quality”, col. 2, lines 1-10 “*new level of service-services ...*”},

{i.e. “transmission of data, or flow aggregation and distribution process”, “service quality packet loss”, see cols. 3-4, Figs. 29A, 29B, col. 31, lines 12-67},

determining and identifying (mapping), on the computing device, a component parameters that represents the performance of the service, and at least 1 value of a

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variable associated with at least 1 of the service parameter that indicates a service level {"packet loss", "availability", see {col. 31, line 11 to col. 33, line 65};

monitoring the at least 1 value of the variable {see Fig. 29A, col. 29, lines 5-50},
and

determining the service level in comparison with the level defined in a service level agreement and taking action to meet the agreement level {col. 33, especially col. 34, lines 1-7 "detects, monitors, and audits ... services being delivered"}.

BALL et al appears to teach the claimed invention except for the steps of "mapping,", "executing, on the computing device, one or more data mining algorithms...", "identifying, on the computing device, a function that defines...", "monitoring, on the computer device, the subset of the plurality of component parameters...", and "determining, on the computing device, whether the service conforms... includes the steps of providing..., inferring..., and determining...".

In a system/method for mapping events for monitoring a subset of data, **Article Data Mining** fairly teaches the mapping (arrange and/or connecting for relationship) of a plurality of components (samples), selected ranges and values, and determining various parameters related to the mapping components, and using the determining parameters for determining other related monitoring issues in response to various queries {see pages 2-3, 4, 5, 6, Fig. On page 7, page 8, Fig. On page 9, page 10, 11, and 12.

Therefore, it would have been obvious to a person having ordinary skill in the art (herein after as "PHOSITA") at the time of the invention was made to modify the

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teachings of BALL et al to include the elements of Article Data Mining for the teachings of mapping plurality of related components, samples or ranges and values, for determining various parameters and relationships, monitoring issues, past trends and to accurately predict future trends and to rapidly turn the massive raw data into significant insights to guide their marketing, investment and management strategies {see page 3}.

In a similar system and method for monitoring and managing communications networks to meet the requirement for Information technology (IT) Service Level Agreements (SLAs) performance, ADRIAANS et al. teaches the steps of:

“executing, on the computing device, one or more data mining algorithms...”,
{see Figs. 3, 4, col. 2, lines 10-67, col. 6, lines 30-40, col. 10, lines 5-67, col. 13, lines 5-35}

“identifying, on the computing device, a function that defines...”,
{see Figs. 3, 4, col. 10, lines 5-67, col. 12, lines 1-67, col. 13, lines 5-35}

"monitoring, on the computer device, the subset of the plurality of component parameters...", and

"determining, on the computing device, whether the service conforms... includes the steps of providing..., inferring..., and determining...".

{see Figs. 2, 3, 4, 6, col. 12, lines 1-67 and col. 13, lines 5-35}.

Therefore, it would have been obvious to a person having ordinary skill in the art (herein after as “PHOSITA”) at the time of the invention was made to modify the teachings of BALL et al/ Article Data Mining to include the elements of ADRIAANS et al. for automatically create model that can learn to plan and predict the effects of network

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components and influences of the various monitor values on the targeted performance variables, or the IT SLA in order to meet the various user requirements in IT SLAs or performance requirements {see col. 5, lines 3-47}.

Alternatively, it would have been obvious to a person having ordinary skill in the art (herein after as "PHOSITA") at the time of the invention was made to modify the teachings of ADRIAANS et al. to include the elements of BALL et al. for providing service level management of a networking service provided to a business entity by identifying service parameters, determining the value of the service parameters, monitoring the service parameters, and taking action to change the parameters to restore the service to acceptable level as defined in a service level agreement (SLA).

Also, the selection of other service parameters or variables among well known parameters, i.e. components or prices or services (availability, response time, security, etc.) would have been obvious as mere selection of other similar parameters or variables from a limited species of parameters/variables.

As for dep. claims 3, 5 (part of 1 above) and 41, 43 (part of 40 above) which appear to deal with level determination parameters and level satisfactions, these are taught in BALL et al Figs. 16, 21, 3031 and ADRIAANS et al. col. 6, lines 55-67, col. 7, lines 1-67, col. 10, lines 1-67 and col. 12, lines 1-67.

As for dep. claims 11-12, 30 (part of 1 above) and 46-48 (part of 40 above) which appear to deal with level determination parameters and level agreements, these are

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taught in BALL et al Figs. 16, 21, 3031 and ADRIAANS et al. col. 6, lines 55-67, col. 7, lines 1-67, col. 10, lines 1-67 and col. 12, lines 1-67.

As for dep. claims 34-37 (part of 1 above) and 49-52 (part of 40 above) which appear to deal with decision analysis determination parameters, i.e. a decision tree that represent influences the plurality of component parameters, these are taught in ADRIAANS et al. Figs. 4, 6, cols. 10, 12-13.

As for dep. claims 38, 39 (part of 1 above), 53-54 (part of 40 above) and which appear to deal with function analysis determination parameters, these are taught in ADRIAANS et al. Figs. 2, 4, cols. 11-13 and BALL et al. {col. 31, line 11 to col. 33, line 65};

As for dep. claims 55-56 (part of 1 above) and 57-58 (part of 40 above) which appear to deal with the features of the subset of the component parameters that have the greatest influence on the service parameters, etc., these are taught in ADRIAANS et al. on cols. 2, 4.

7. Dependent claims 59-61 and 62-64 rejected under 35 U.S.C. 103(a) as being unpatentable over BALL et al /Article Data Mining /ADRIAANS et al. as applied to claims 1, 3, 5, 11-12, 30-31, 34-39, 55-56 (method), 40, 41, 43, 46-54 and 57-58 (system) above, and further in view of DITMER et al. (US 6,490,620).

In a similar system and method for monitoring and managing communications networks to meet the requirement for Information technology (IT) Subscriber (User)

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service performance, DITMER et al teaches the concept of a network that includes multiple domains (59), receiving alarms from the network, analyzing and trending the alarms, correlating the alarm occurrences to network parameters such as availability, network performance and performing analysis to obtain problem resolutions (60-61) {see col. 8, lines 1-25, col. 11, lines 35-50, col. 15, lines 1-25, Figs. 2, 4, 5, 7, 10(d)}

Therefore, it would have been obvious to a person having ordinary skill in the art (herein after as “PHOSITA”) at the time of the invention was made to modify the teachings of BALL et al/ Article Data Mining /ADRIAANS et al. to include the features taught by DITMER et al above for monitoring network performance of subscribers (users) and analyzing and trending the alarms, correlating the alarm occurrences to network parameters such as availability, network performance and performing analysis to obtain problem resolutions.

Response to Arguments

8. Applicant's arguments with respect to the previous claims on 9/13/2010 have been considered but are moot in view of the new ground(s) of rejection which are caused by applicant's amendment of the claims.

No claims are allowed.

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9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through private PAIR only. For more information about the PAIR system, see <http://pair-direct@uspto.gov>. Should you have any questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

1. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

2. Any response to this action should be mailed to:

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Washington, D.C. 20231

or faxed to **571-273-8300**.

Hand delivered responses should be brought to the

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3. In receiving an Office Action, it becomes apparent that certain documents are missing, e. g. copies of references, Forms PTO 1449, PTO-892, etc., requests for copies should be directed to Tech Center 3600 Customer Service at (571) 272-3600, or e-mail CustomerService3600@uspto.gov.

4. Any inquiry concerning the merits of the examination of the application should be directed to Dean Tan Nguyen at telephone number (571) 272-6806. My work schedule is normally Monday through Friday from 6:30 am - 4:00 pm. I am scheduled to be off every other Friday. Should I be unavailable during my normal working hours, my supervisor Janice Mooneyham can be reached at (571) 272-6805. The main FAX phone numbers for formal communications concerning this application are **(571) 273-8300**. My personal Fax is (571) 273-6806. Informal communications may be made, following a telephone call to the examiner, by an informal FAX number to be given.

/Tan Dean D. Nguyen/

Primary Examiner, Art Unit 3689